RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/591,576_

Source: _1Fw/_

Date Processed by STIC: _9/15/06_

ENTERED

RAW SEQUENCE LISTING   DATE: 09/15/2006
PATENT APPLICATION: **US/10/591,576**   TIME: 09:13:59

Input Set : **A:\SHIMIZU-13111_sq.txt**
Output Set: **N:\CRF4\09152006\J591576.raw**

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 3 <110> APPLICANT: KAKU, Hanae
 4       SHIBUYA, Naoto
 5       MINAMI, Eiichi
 6       MINAMI, Naoko
 7       NISHIZAWA, Yoko
 8       TAKIO, Koji
 9       DOHMAE, Naoshi
11 <120> TITLE OF INVENTION: CHITIN OLIGOSACCHARIDE ELICITOR-BINDING PROTEINS
13 <130> FILE REFERENCE: SHIMIZU-13111
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C--> 15 **<140> CURRENT APPLICATION NUMBER: US/10/591,576**
C--> 15 **<141> CURRENT FILING DATE: 2006-08-31**
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15 <150> PRIOR APPLICATION NUMBER: PCT/JP2005/003451
16 <151> PRIOR FILING DATE: 2005-03-02
18 <150> PRIOR APPLICATION NUMBER: JP2004-59551
19 <151> PRIOR FILING DATE: 2004-03-03
21 <160> NUMBER OF SEQ ID NOS: 23
23 <170> SOFTWARE: PatentIn version 3.3
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 1071
27 <212> TYPE: DNA
28 <213> ORGANISM: Oryza sativa
31 <220> FEATURE:
32 <221> NAME/KEY: CDS
33 <222> LOCATION: (1)..(1071)
35 <400> SEQUENCE: 1
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37 Met Ala Ser Leu Thr Ala Ala Leu Ala Thr Pro Ala Ala Ala Ala Leu
38 1               5                   10                  15
40 ctc ctc ctc gtc ctc ctc gcc gcc ccc gcc tcc gcc gcc aac ttc acc      96
41 Leu Leu Leu Val Leu Leu Ala Ala Pro Ala Ser Ala Ala Asn Phe Thr
42               20                  25                  30
44 tgc gcg gtg gct tca ggc acc acc tgc aag tcc gcc atc ctc tac acc     144
45 Cys Ala Val Ala Ser Gly Thr Thr Cys Lys Ser Ala Ile Leu Tyr Thr
46          35                  40                  45
48 tcc ccc aac gcc acc acc tac ggc aac ctc gtc gcc cgc ttc aac acc     192
49 Ser Pro Asn Ala Thr Thr Tyr Gly Asn Leu Val Ala Arg Phe Asn Thr
50      50                  55                  60
52 acc acc ctc ccc gac ctc ctc ggc gcc aac ggc ctc ccc gac ggc acg     240
53 Thr Thr Leu Pro Asp Leu Leu Gly Ala Asn Gly Leu Pro Asp Gly Thr
54 65                  70                  75                  80
56 ctt tcc tcc gcc ccc gtc gcc gcc aat tcc acc gtc aaa atc ccc ttc     288
57 Leu Ser Ser Ala Pro Val Ala Ala Asn Ser Thr Val Lys Ile Pro Phe
58              85                  90                  95
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Input Set : **A:\SHIMIZU-13111_sq.txt**
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 60 cgc tgc cgc tgc aac ggc gac gtc ggc cag tcg gac cgc ctc ccc atc        336
 61 Arg Cys Arg Cys Asn Gly Asp Val Gly Gln Ser Asp Arg Leu Pro Ile
 62         100                 105                 110
 64 tac gtc gtg cag ccg cag gac ggg ctc gac gcc atc gcg cgc aac gtg        384
 65 Tyr Val Val Gln Pro Gln Asp Gly Leu Asp Ala Ile Ala Arg Asn Val
 66         115                 120                 125
 68 ttc aac gcc ttc gtc acc tac cag gag atc gcc gcc gcg aac aac atc        432
 69 Phe Asn Ala Phe Val Thr Tyr Gln Glu Ile Ala Ala Ala Asn Asn Ile
 70     130                 135                 140
 72 ccc gac ccc aac aag ata aat gtc agc cag acg ctg tgg att ccg ctg        480
 73 Pro Asp Pro Asn Lys Ile Asn Val Ser Gln Thr Leu Trp Ile Pro Leu
 74 145                 150                 155                 160
 76 ccc tgc agc tgc gac aag gag gaa ggc tct aac gtg atg cac ctc gcc        528
 77 Pro Cys Ser Cys Asp Lys Glu Glu Gly Ser Asn Val Met His Leu Ala
 78                 165                 170                 175
 80 tac agc gtc ggc aaa ggg gag aac acg tcg gcg atc gct gcc aag tac        576
 81 Tyr Ser Val Gly Lys Gly Glu Asn Thr Ser Ala Ile Ala Ala Lys Tyr
 82             180                 185                 190
 84 ggg gtg acg gag tcc acg ctt ctc acc aga aat aag atc gac gac ccc        624
 85 Gly Val Thr Glu Ser Thr Leu Leu Thr Arg Asn Lys Ile Asp Asp Pro
 86         195                 200                 205
 88 acg aaa ttg cag atg gga cag att cta gat gtc ccg ctc cct gtg tgc        672
 89 Thr Lys Leu Gln Met Gly Gln Ile Leu Asp Val Pro Leu Pro Val Cys
 90     210                 215                 220
 92 cgt tca tca atc agc gat acc tca gct gat cac aat ctg atg ctc ctc        720
 93 Arg Ser Ser Ile Ser Asp Thr Ser Ala Asp His Asn Leu Met Leu Leu
 94 225                 230                 235                 240
 96 ccg gat ggc acc tat gga ttc acc gca gga aac tgc atc cgc tgc agc        768
 97 Pro Asp Gly Thr Tyr Gly Phe Thr Ala Gly Asn Cys Ile Arg Cys Ser
 98                 245                 250                 255
100 tgc agt tca act acc tac cag cta aac tgc act gca gta cag aac aag        816
101 Cys Ser Ser Thr Thr Tyr Gln Leu Asn Cys Thr Ala Val Gln Asn Lys
102             260                 265                 270
104 gga tgc ccg tca gtg cca ctg tgc aat gga acg ctg aag ctt ggt gag        864
105 Gly Cys Pro Ser Val Pro Leu Cys Asn Gly Thr Leu Lys Leu Gly Glu
106         275                 280                 285
108 acg aac ggc acc ggt tgc gga tca aca acg tgc gcc tac agt ggt tac        912
109 Thr Asn Gly Thr Gly Cys Gly Ser Thr Thr Cys Ala Tyr Ser Gly Tyr
110     290                 295                 300
112 tcc aac agt tca tcg ctc atc ata caa acc agc ctt gca act aat cag        960
113 Ser Asn Ser Ser Ser Leu Ile Ile Gln Thr Ser Leu Ala Thr Asn Gln
114 305                 310                 315                 320
116 aca aca gcc tgc cag aga gga gga tct ggg agg tcg cag ttc gct agg       1008
117 Thr Thr Ala Cys Gln Arg Gly Gly Ser Gly Arg Ser Gln Phe Ala Arg
118             325                 330                 335
120 tcc atg tgg agc atg tct gtt atc tcc ttc cac atg gtg ttg atc att       1056
121 Ser Met Trp Ser Met Ser Val Ile Ser Phe His Met Val Leu Ile Ile
122             340                 345                 350
124 atc tgt ttc ctt tga                                                   1071
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125 Ile Cys Phe Leu
126         355
129 <210> SEQ ID NO: 2
130 <211> LENGTH: 356
131 <212> TYPE: PRT
132 <213> ORGANISM: Oryza sativa
134 <400> SEQUENCE: 2
136 Met Ala Ser Leu Thr Ala Ala Leu Ala Thr Pro Ala Ala Ala Ala Leu
137 1               5                   10                  15
140 Leu Leu Leu Val Leu Leu Ala Ala Pro Ala Ser Ala Ala Asn Phe Thr
141             20                  25                  30
144 Cys Ala Val Ala Ser Gly Thr Thr Cys Lys Ser Ala Ile Leu Tyr Thr
145             35                  40                  45
148 Ser Pro Asn Ala Thr Thr Tyr Gly Asn Leu Val Ala Arg Phe Asn Thr
149     50                  55                  60
152 Thr Thr Leu Pro Asp Leu Leu Gly Ala Asn Gly Leu Pro Asp Gly Thr
153 65                  70                  75                  80
156 Leu Ser Ser Ala Pro Val Ala Ala Asn Ser Thr Val Lys Ile Pro Phe
157             85                  90                  95
160 Arg Cys Arg Cys Asn Gly Asp Val Gly Gln Ser Asp Arg Leu Pro Ile
161             100                 105                 110
164 Tyr Val Val Gln Pro Gln Asp Gly Leu Asp Ala Ile Ala Arg Asn Val
165             115                 120                 125
168 Phe Asn Ala Phe Val Thr Tyr Gln Glu Ile Ala Ala Ala Asn Asn Ile
169     130                 135                 140
172 Pro Asp Pro Asn Lys Ile Asn Val Ser Gln Thr Leu Trp Ile Pro Leu
173 145                 150                 155                 160
176 Pro Cys Ser Cys Asp Lys Glu Glu Gly Ser Asn Val Met His Leu Ala
177             165                 170                 175
180 Tyr Ser Val Gly Lys Gly Glu Asn Thr Ser Ala Ile Ala Ala Lys Tyr
181             180                 185                 190
184 Gly Val Thr Glu Ser Thr Leu Leu Thr Arg Asn Lys Ile Asp Asp Pro
185             195                 200                 205
188 Thr Lys Leu Gln Met Gly Gln Ile Leu Asp Val Pro Leu Pro Val Cys
189     210                 215                 220
192 Arg Ser Ser Ile Ser Asp Thr Ser Ala Asp His Asn Leu Met Leu Leu
193 225                 230                 235                 240
196 Pro Asp Gly Thr Tyr Gly Phe Thr Ala Gly Asn Cys Ile Arg Cys Ser
197             245                 250                 255
200 Cys Ser Ser Thr Thr Tyr Gln Leu Asn Cys Thr Ala Val Gln Asn Lys
201             260                 265                 270
204 Gly Cys Pro Ser Val Pro Leu Cys Asn Gly Thr Leu Lys Leu Gly Glu
205             275                 280                 285
208 Thr Asn Gly Thr Gly Cys Gly Ser Thr Thr Cys Ala Tyr Ser Gly Tyr
209     290                 295                 300
212 Ser Asn Ser Ser Ser Leu Ile Ile Gln Thr Ser Leu Ala Thr Asn Gln
213 305                 310                 315                 320
216 Thr Thr Ala Cys Gln Arg Gly Gly Ser Gly Arg Ser Gln Phe Ala Arg
217             325                 330                 335
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RAW SEQUENCE LISTING   DATE: 09/15/2006
PATENT APPLICATION: **US/10/591,576**   TIME: 09:13:59

Input Set : **A:\SHIMIZU-13111_sq.txt**
Output Set: **N:\CRF4\09152006\J591576.raw**

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220 Ser Met Trp Ser Met Ser Val Ile Ser Phe His Met Val Leu Ile Ile
221         340             345                 350
224 Ile Cys Phe Leu
225         355
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229 <211> LENGTH: 987
230 <212> TYPE: DNA
231 <213> ORGANISM: Oryza sativa
234 <220> FEATURE:
235 <221> NAME/KEY: CDS
236 <222> LOCATION: (1)..(987)
238 <400> SEQUENCE: 3
239 gcc aac ttc acc tgc gcg gtg gct tca ggc acc acc tgc aag tcc gcc      48
240 Ala Asn Phe Thr Cys Ala Val Ala Ser Gly Thr Thr Cys Lys Ser Ala
241 1               5                   10                  15
243 atc ctc tac acc tcc ccc aac gcc acc acc tac ggc aac ctc gtc gcc      96
244 Ile Leu Tyr Thr Ser Pro Asn Ala Thr Thr Tyr Gly Asn Leu Val Ala
245             20                  25                  30
247 cgc ttc aac acc acc acc ctc ccc gac ctc ctc ggc gcc aac ggc ctc     144
248 Arg Phe Asn Thr Thr Thr Leu Pro Asp Leu Leu Gly Ala Asn Gly Leu
249         35                  40                  45
251 ccc gac ggc acg ctt tcc tcc gcc ccc gtc gcc gcc aat tcc acc gtc     192
252 Pro Asp Gly Thr Leu Ser Ser Ala Pro Val Ala Ala Asn Ser Thr Val
253     50                  55                  60
255 aaa atc ccc ttc cgc tgc cgc tgc aac ggc gac gtc ggc cag tcg gac     240
256 Lys Ile Pro Phe Arg Cys Arg Cys Asn Gly Asp Val Gly Gln Ser Asp
257 65                  70                  75                  80
259 cgc ctc ccc atc tac gtc gtg cag ccg cag gac ggg ctc gac gcc atc     288
260 Arg Leu Pro Ile Tyr Val Val Gln Pro Gln Asp Gly Leu Asp Ala Ile
261             85                  90                  95
263 gcg cgc aac gtg ttc aac gcc ttc gtc acc tac cag gag atc gcc gcc     336
264 Ala Arg Asn Val Phe Asn Ala Phe Val Thr Tyr Gln Glu Ile Ala Ala
265             100                 105                 110
267 gcg aac aac atc ccc gac ccc aac aag ata aat gtc agc cag acg ctg     384
268 Ala Asn Asn Ile Pro Asp Pro Asn Lys Ile Asn Val Ser Gln Thr Leu
269         115                 120                 125
271 tgg att ccg ctg ccc tgc agc tgc gac aag gag gaa ggc tct aac gtg     432
272 Trp Ile Pro Leu Pro Cys Ser Cys Asp Lys Glu Glu Gly Ser Asn Val
273     130                 135                 140
275 atg cac ctc gcc tac agc gtc ggc aaa ggg gag aac acg tcg gcg atc     480
276 Met His Leu Ala Tyr Ser Val Gly Lys Gly Glu Asn Thr Ser Ala Ile
277 145                 150                 155                 160
279 gct gcc aag tac ggg gtg acg gag tcc acg ctt ctc acc aga aat aag     528
280 Ala Ala Lys Tyr Gly Val Thr Glu Ser Thr Leu Leu Thr Arg Asn Lys
281                 165                 170                 175
283 atc gac gac ccc acg aaa ttg cag atg gga cag att cta gat gtc ccg     576
284 Ile Asp Asp Pro Thr Lys Leu Gln Met Gly Gln Ile Leu Asp Val Pro
285             180                 185                 190
287 ctc cct gtg tgc cgt tca tca atc agc gat acc tca gct gat cac aat     624
```

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PATENT APPLICATION: US/10/591,576   TIME: 09:13:59

       Input Set : A:\SHIMIZU-13111_sq.txt
       Output Set: N:\CRF4\09152006\J591576.raw

288 Leu Pro Val Cys Arg Ser Ser Ile Ser Asp Thr Ser Ala Asp His Asn
289   195   200   205
291 ctg atg ctc ctc ccg gat ggc acc tat gga ttc acc gca gga aac tgc   672
292 Leu Met Leu Leu Pro Asp Gly Thr Tyr Gly Phe Thr Ala Gly Asn Cys
293   210   215   220
295 atc cgc tgc agc tgc agt tca act acc tac cag cta aac tgc act gca   720
296 Ile Arg Cys Ser Cys Ser Ser Thr Thr Tyr Gln Leu Asn Cys Thr Ala
297 225   230   235   240
299 gta cag aac aag gga tgc ccg tca gtg cca ctg tgc aat gga acg ctg   768
300 Val Gln Asn Lys Gly Cys Pro Ser Val Pro Leu Cys Asn Gly Thr Leu
301   245   250   255
303 aag ctt ggt gag acg aac ggc acc ggt tgc gga tca aca acg tgc gcc   816
304 Lys Leu Gly Glu Thr Asn Gly Thr Gly Cys Gly Ser Thr Thr Cys Ala
305   260   265   270
307 tac agt ggt tac tcc aac agt tca tcg ctc atc ata caa acc agc ctt   864
308 Tyr Ser Gly Tyr Ser Asn Ser Ser Ser Leu Ile Ile Gln Thr Ser Leu
309   275   280   285
311 gca act aat cag aca aca gcc tgc cag aga gga gga tct ggg agg tcg   912
312 Ala Thr Asn Gln Thr Thr Ala Cys Gln Arg Gly Gly Ser Gly Arg Ser
313   290   295   300
315 cag ttc gct agg tcc atg tgg agc atg tct gtt atc tcc ttc cac atg   960
316 Gln Phe Ala Arg Ser Met Trp Ser Met Ser Val Ile Ser Phe His Met
317 305   310   315   320
319 gtg ttg atc att atc tgt ttc ctt tga   987
320 Val Leu Ile Ile Ile Cys Phe Leu
321   325
324 <210> SEQ ID NO: 4
325 <211> LENGTH: 328
326 <212> TYPE: PRT
327 <213> ORGANISM: Oryza sativa
329 <400> SEQUENCE: 4
331 Ala Asn Phe Thr Cys Ala Val Ala Ser Gly Thr Thr Cys Lys Ser Ala
332 1   5   10   15
335 Ile Leu Tyr Thr Ser Pro Asn Ala Thr Thr Tyr Gly Asn Leu Val Ala
336   20   25   30
339 Arg Phe Asn Thr Thr Thr Leu Pro Asp Leu Leu Gly Ala Asn Gly Leu
340   35   40   45
343 Pro Asp Gly Thr Leu Ser Ser Ala Pro Val Ala Ala Asn Ser Thr Val
344   50   55   60
347 Lys Ile Pro Phe Arg Cys Arg Cys Asn Gly Asp Val Gly Gln Ser Asp
348 65   70   75   80
351 Arg Leu Pro Ile Tyr Val Val Gln Pro Gln Asp Gly Leu Asp Ala Ile
352   85   90   95
355 Ala Arg Asn Val Phe Asn Ala Phe Val Thr Tyr Gln Glu Ile Ala Ala
356   100   105   110
359 Ala Asn Asn Ile Pro Asp Pro Asn Lys Ile Asn Val Ser Gln Thr Leu
360   115   120   125
363 Trp Ile Pro Leu Pro Cys Ser Cys Asp Lys Glu Glu Gly Ser Asn Val
364   130   135   140

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/15/2006
PATENT APPLICATION: US/10/591,576   TIME: 09:14:00

          Input Set : A:\SHIMIZU-13111_sq.txt
          Output Set: N:\CRF4\09152006\J591576.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; Xaa Pos. 2,5,13,30

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:11,12,14,15,16,17,18,19,20,21,22,23

VERIFICATION SUMMARY   DATE: 09/15/2006
PATENT APPLICATION: **US/10/591,576**   TIME: 09:14:00

Input Set : **A:\SHIMIZU-13111_sq.txt**
Output Set: **N:\CRF4\09152006\J591576.raw**

L:15 M:270 C: Current Application Number differs, Replaced Current Application No
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:802 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
M:341 Repeated in SeqNo=9